

Description

SPLINE

TOP BRACE

SIDE BRACE

SPANNER SOCKET

FENDER WASHER

FLAT WASHER

SOCKET HEAD CAP SCREW

SOCKET HEAD CAP SCREW

COMPRESSION SPRING

SOCKET HEAD SHOUDER BOLT

ADJUSTER

WRENCH

BASE

Material

4140/4142

1018/1020 CR

1018/1020 CR

1018/1020 CR

4140/4142

4140/4142 A36/1018/1020 HR

STEEL

STEEL

S.S.

S.S

STEEL

STEEL

B/O INFORMATION OR SPECIFICATIONS

M8X1.25 X 16mm (MCMASTER-CARR #91290A418

Ø1-7/32 X Ø.091 WIRE X 2 (MCMASTER-CARR #9637K18)

(MCMASTER-CARR #92140A116)

(MCMASTER-CARR #90278A411)

(MCMASTER-CARR #92290A230)

(MCMASTER-CARR #98029A038)

Ø5/16 I.D. X Ø1-1/4 O.D.

M8X1.25 X 8mm

M5X0.8 X 14mm

Ø1 I.D. X Ø2 O.D.

ASSY QTY

Part #

-3

-9

-11

-13

-15

-17

-19

-21

-23

-25

2

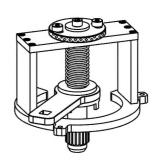
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	REVISIONS							
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED			
1		-1 ADDED TOLERANCE TO R.125 AND LIMITS FOR .750 SQUARE DRIVE7 ADDED CHAMFER 2X .03 X 45°9 ADDED 2X R.03 TO I.D11 ADDED ENGRAVE NOTE, DELETED CHAMFER AROUND HEX, CH'D .03 X 45° TO HAND BUFF EDGES.	10/3/2012	RJC	SE			
2	15-0159	-1 ADDED 4142 Q&T TO MATERIAL CALL OUT, CH'D RADII WAS R.125 +.005000 IS R.130 +.005000.	7/21/2015	RJC	JAG			
3	16-0034	UPDATED TO NEW STANDARDS. ADDED OEM REF1 ADDED DIM 6.779 CH'D DIM WAS 2X 1.4175-1.4205 IS 3X 1.4175-1.4205. CH'D DIM WAS 2X 1.4245-1.4260 IS 3X 1.4245-1.426013 CH'D DIM WAS Ø7.319 B.C. IS (Ø7.319 B.C.).	2/15/2016	DPD	JAG			
4	16-0123	-1 -3 -5 -7 -9 -11 -13 ADDED FINISH SPEC11 CH'D MAT'L WAS 1018/1020 CR IS 4140/4142. ADDED HEAT TREAT.	8/18/2016	DEW	JAG			
5	16-0266	-1 CH'D DIM WAS Ø1.000/.999 S.F3 IS Ø1.000/.999 (S.F3), WAS 2X .752/.747 S.F7 IS 2X .752/.747 (S.F7), -1, -9 CH'D MATERIAL WAS 4140/4142 Q&T IS 4140/4142, ADDED HEAT TREAT RC 28-34, -3 CH'D DIM WAS Ø1.0038/1.0025 THRU S.F1 IS Ø1.0038/1.0025 THRU ALL (S.F1), -7 CH'D DIM WAS Ø3.00 MED, KNURL IS Ø2.95 MED, KNURL, WAS 2X .758/.753 S.F1 IS 2X .758/.753 (S.F1), -9 CH'D DIM WAS Ø1.0025 S.F1 IS Ø1.0038/1.0025 (S.F1), WAS Ø1.0038/1.0025 S.F1 IS Ø1.4255/1.4175 (S.F11), -11 CH'D DIM WAS Ø3.1.4245 S.F9 IS 3X 1.4260/1.4245 (S.F9), -13 CH'D MATERIAL WAS 1018/1020 CR IS A36/1018/1020 HR.	12/6/2016	RJC	SM			



2

3

4

5

6

8

NOTES: 1. PART OF KIT RBW6505G00331-3T.

2. REF. AGUSTA T/N: 3T6521A00138-W142AH.

DART
AEROSPACE

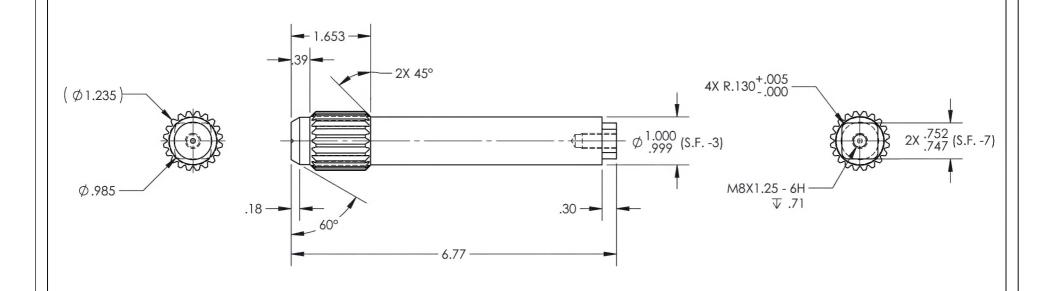
PG. TITLE **NUT TORQUE TOOL**

RBW6521A00138-W142AH-3T

FEV 5

	WAIL			ONLESS OTHERWISE SPECIFIED				
	HEAT TREAT			.XXX ± .005				
	FINISH				.XX ± .01 .X ± .1	ANGLES ±.5° SURFACES = 125/		
SPEC					1. BREAK ALL SHARP EDGES			
	DRAWN BY:	PERRITT			.015 x 45° (OR .015R NAL LIMITS APPLY		
	CHECKED:	CHECKED: CLOUGH				AFTER PLATING 3. INTERPRET DIM AND TOL PER		
	OPPS APPR:	OPPS APPR: ANDERSON			ASME Y14.			
	QA APPR:	LINDSAY	′			USED ON MODEL		
APPROVED: GILBERT			AW139					
	SCALE	1:5	DATE	12/	31/2008	SHEET 1 OF 8		

	REVISIONS							
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED			
1		-1 ADDED TOLERANCE TO R.125 AND LIMITS FOR .750 SQUARE DRIVE.	10/3/2012	RJC	SE			
2	15-0159	-1 ADDED 4142 Q&T TO MATERIAL CALL OUT, CH'D RADII WAS R.125 +.005000 IS R.130 +.005000.	7/21/2015	RJC	JAG			
3	16-0034	-1 ADDED DIM 6.77.	2/15/2016	DPD	JAG			
4	16-0123	-1 ADDED FINISH SPEC.	8/18/2016	DEW	JAG			
5	16-0266	-1 CH'D DIM WAS Ø1.000/.999 S.F3 IS Ø1.000/.999 (S.F3), WAS 2X .752/.747 S.F7 IS 2X .752/.747 (S.F7), CH'D MATERIAL WAS 4140/4142 Q&T IS 4140/4142, ADDED HEAT TREAT RC 28-34.	12/6/2016	RJC	SM			

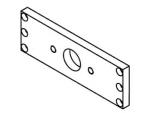


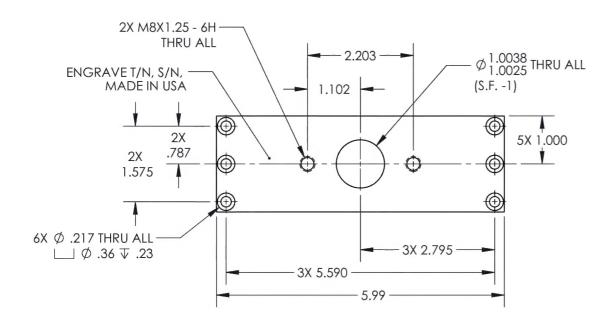
EXTERNAL SPINE DATA					
NUMBER OF TEETH	20				
MODULE	1.5				
PRESSURE ANGLE	30°				
STANDARD	1980				
DEPTH	.0138				
MAJOR DIAMETER	1.235				
DIMENSION OVER Ø.125 PINS	1.386				
TOLERANCE	004				
DIMENSION OVER Ø.120 PINS	1.372				

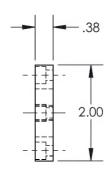
-1) SPLINE

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TITLE	NUT TORQUE TOOL							
DWG NO. RB	DWG NO. RBW6521A00138-W142AH-3T-1 5 5							
HEAT RC 28	HEAT DC 29 24			UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± .5° .X ± .1 SURFACES = 125/				
	6.2.2, B.O. R		.X ± .1 SURFACES = 125/ 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R					
CHECKED: OPPS APPR:	CLOUGH			2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009				
QA APPR: LINDSAY		USED ON MODEL						
APPROVED:	APPROVED: GILBERT		AW139					
SCALE	1:2	DATE 12/	31/2008	SHEET 2 OF	8			

	REVISIONS							
REV	ECR DESCRIPTION				APPROVED			
4	16-0123	-3 ADDED FINISH SPEC.	8/18/2016	DEW	JAG			
5	16-0266	-3 CH'D DIM WAS Ø1.0038/1.0025 THRU S.F1 IS Ø1.0038/1.0025 THRU ALL (S.F1).	12/6/2016	RJC	SM			







DART

TITLE

NUT TORQUE TOOL

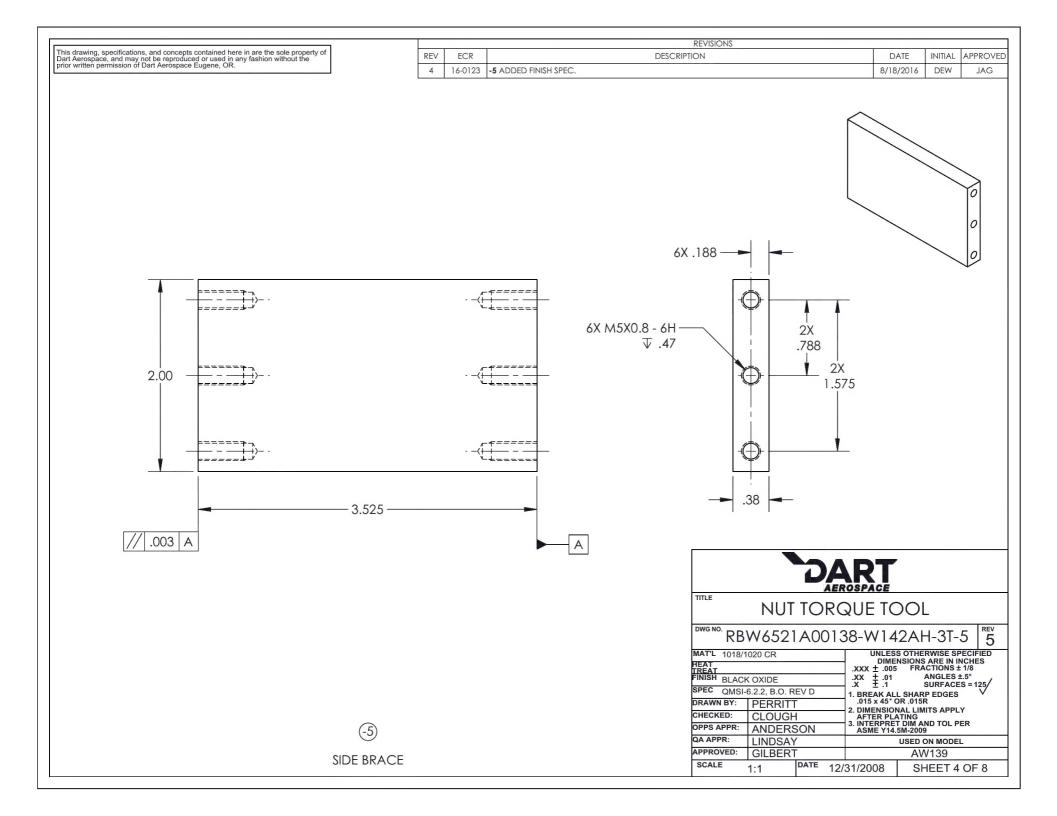
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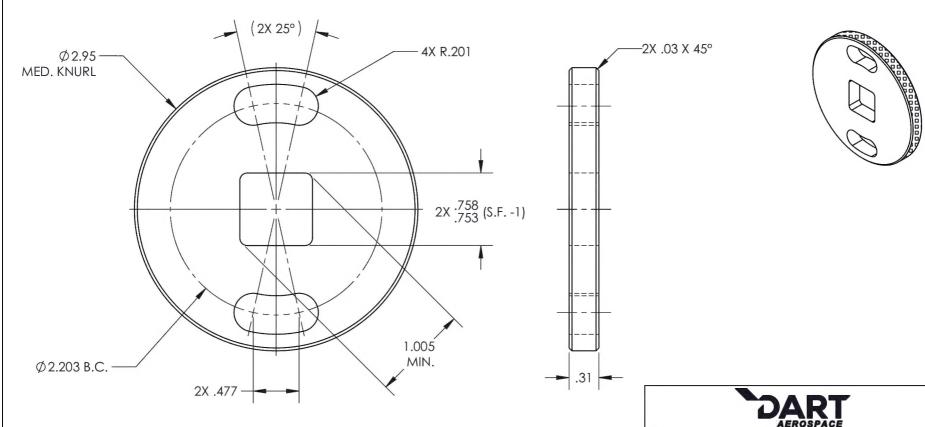
MAT'L 1018/1 HEAT	020 CR		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			
TREAT			.XXX ± .005	FRACTIONS ± 1/8		
FINISH BLACK OXIDE				.XX ± .01	ANGLES ±.5° SURFACES = 125/	
SPEC QMSI-6.2.2, B.O. REV D				1. BREAK ALL SHARP EDGES		
DRAWN BY:	PERRITT	PERRITT		.015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY		
CHECKED:	CLOUGH		AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009			
OPPS APPR:	ANDERSON					
QA APPR:	LINDSAY		USED ON MODEL			
APPROVED:	GILBERT		AW139			
SCALE	1:2	DATE	12/	31/2008	SHEET 3 OF 8	

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TOP BRACE



	REVISIONS						
REV	ECR	DATE	INITIAL	APPROVED			
1		-7 ADDED CHAMFER 2X .03 X 45°.	10/3/2012	RJC	SE		
4	16-0123	-7 ADDED FINISH SPEC.	8/18/2016	DEW	JAG		
5	16-0266	-7 CH'D DIM WAS Ø3.00 MED. KNURL IS Ø2.95 MED. KNURL, WAS 2X .758/.753 S.F1 IS 2X .758/.753 (S.F1).	12/6/2016	RJC	SM		



(-7)

ADJUSTER

NUT TORQUE TOOL

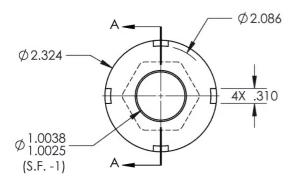
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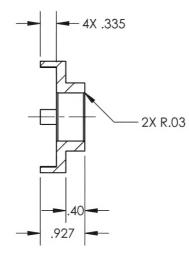
	020 CR		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES				
HEAT TREAT			.XXX ± .005 FRACTIONS ± 1/8				
	OXIDE		.XX ± .01	ANGLES ±.5° SURFACES = 125/			
SPEC QMSI-	6.2.2, B.O. R	EV D	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY				
DRAWN BY:	PERRITT						
CHECKED:	CLOUGH		AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009				
OPPS APPR:	ANDERSON						
QA APPR:	LINDSAY		USED ON MODEL				
APPROVED:	GILBERT		AW139				
SCALE	1:1	DATE 12/	31/2008	SHEET 5 OF 8			

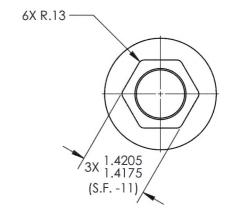
	REVISIONS							
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED			
1	-9 ADDED 2X R.03 TO I.D.				SE			
3	16-0034	-9 CH'D DIM WAS 2X 1.4175-1.4205 IS 3X 1.4175-1.4205.	2/15/2016	DPD	JAG			
4	16-0123	-9 ADDED FINISH SPEC.	8/18/2016	DEW	JAG			
5	16-0266	-9 CH'D DIM WAS Ø1.0038/1.0025 S.F1 IS Ø1.0038/1.0025 [S.F1], WAS 3X 1.4205/1.4175 S.F11 IS 3X 1.4205/1.4175 [S.F11], CH'D MATERIAL WAS 4140/4142 Q&T IS 4140/4142, ADDED HEAT TREAT R 28-34.	12/6/2016	RJC	SM			



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SECTION A-A



NUT TORQUE TOOL

DWG NO. RBW6521A00138-W142AH-3T-9

MAT'L 4140/4	142		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			
HEAT RC 28-34				.XXX ± .005	FRACTIONS ± 1/8	
FINISH BLACK OXIDE				.XX ± .01	ANGLES ±.5° SURFACES = 125/	
SPEC QMSI-6.2.2, B.O. REV D				1. BREAK ALL SHARP EDGES		
DRAWN BY:	PERRITT			.015 x 45° C	OR .015R NAL LIMITS APPLY	
CHECKED:	CLOUGH		AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009			
OPPS APPR:	ANDERSON					
QA APPR:	LINDSAY		USED ON MODEL			
APPROVED:	GILBERT		AW139			
SCALE	1:2	DATE	12/	31/2008	SHEET 6 OF 8	



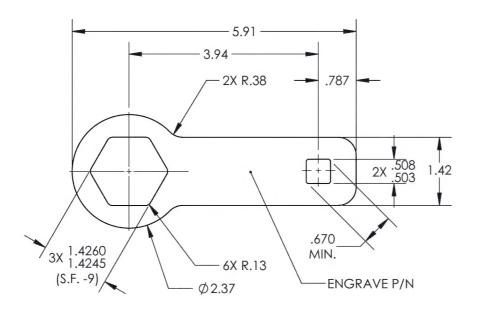
SPANNER SOCKET

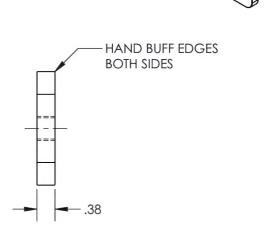
	REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-11 ADDED ENGRAVE NOTE, DELETED CHAMFER AROUND HEX, CH'D .03 X 45° TO HAND BUFF EDGES.	10/3/2012	RJC	SE
3	16-0034	-11 CH'D DIM WAS 2X 1.4245-1.4260 IS 3X 1.4245-1.4260.	2/15/2016	DPD	JAG
4	16-0123	-11 CH'D MAT'L WAS 1018/1020 CR IS 4140/4142, ADDED FINISH SPEC AND HEAT TREAT.	8/18/2016	DEW	JAG
5	16-0266	-11 CH'D DIM WAS 3X 1.4260/1.4245 S.F9 IS 3X 1.4260/1.4245 (S.F9).	12/6/2016	RJC	SM

TITLE

SCALE

1:2







DATE 12/31/2008

SHEET 7 OF 8



WRENCH

